

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/663,650A  
Source: IFW  
Date Processed by STIC: 10/29/04

***ENTERED***



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/663,650A

DATE: 10/29/2004

TIME: 17:14:05

Input Set : A:\Updated Sequence Listing.ST25.txt  
 Output Set: N:\CRF4\10292004\J663650A.raw

3 <110> APPLICANT: Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo  
 4 ARIYASU, Toshio  
 5 MATSUMOTO, Shuji  
 6 KYONO, Fumiyo  
 7 HANAYA, Toshiharu  
 8 ARAI, Shigeyuki  
 9 IKEDA, Masao  
 10 KURIMOTO, Masashi  
 12 <120> TITLE OF INVENTION: TREHALOSE RECEPTOR AND METHOD FOR DETECTING TREHALOSE WITH  
 THE  
 13 SAME  
 15 <130> FILE REFERENCE: ARIYASU2  
 17 <140> CURRENT APPLICATION NUMBER: 10/663,650A  
 18 <141> CURRENT FILING DATE: 2003-09-17  
 20 <160> NUMBER OF SEQ ID NOS: 24  
 22 <170> SOFTWARE: PatentIn version 3.3  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 374  
 26 <212> TYPE: PRT  
 27 <213> ORGANISM: Homo sapiens  
 30 <220> FEATURE:  
 31 <221> NAME/KEY: misc\_feature  
 32 <223> OTHER INFORMATION: GENBANK Accession no. M80632  
 34 <400> SEQUENCE: 1  
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 37 1 5 10 15  
 40 Glu Glu Lys Thr Ala Ala Arg Ile Asp Gln Glu Ile Asn Arg Ile Leu  
 41 20 25 30  
 44 Leu Glu Gln Lys Lys Gln Glu Arg Glu Glu Leu Lys Leu Leu Leu  
 45 35 40 45  
 48 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile  
 49 50 55 60  
 52 Ile His Gly Val Gly Tyr Ser Glu Glu Asp Arg Arg Ala Phe Arg Leu  
 53 65 70 75 80  
 56 Leu Ile Tyr Gln Asn Ile Phe Val Ser Met Gln Ala Met Ile Asp Ala  
 57 85 90 95  
 60 Met Asp Arg Leu Gln Ile Pro Phe Ser Arg Pro Asp Ser Lys Gln His  
 61 100 105 110  
 64 Ala Ser Leu Val Met Thr Gln Asp Pro Tyr Lys Val Ser Thr Phe Glu  
 65 115 120 125  
 68 Lys Pro Tyr Ala Val Ala Met Gln Tyr Leu Trp Arg Asp Ala Gly Ile  
 69 130 135 140  
 72 Arg Ala Cys Tyr Glu Arg Arg Glu Phe His Leu Leu Asp Ser Ala  
 73 145 150 155 160

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76 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Ser Glu Asp Ser Tyr Ile  
 77 165 170 175  
 80 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile  
 81 180 185 190  
 84 Asn Glu Tyr Cys Phe Ser Val Lys Lys Thr Lys Leu Arg Ile Val Asp  
 85 195 200 205  
 88 Val Gly Gly Gln Arg Ser Glu Arg Arg Lys Trp Ile His Cys Phe Glu  
 89 210 215 220  
 92 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln  
 93 225 230 235 240  
 96 Cys Leu Glu Glu Asn Asp Gln Glu Asn Arg Met Glu Glu Ser Leu Ala  
 97 245 250 255  
 100 Leu Phe Ser Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val  
 101 260 265 270  
 104 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Asp Lys Ile His Thr  
 105 275 280 285  
 108 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Arg Arg Asp  
 109 290 295 300  
 112 Ala Glu Ala Ala Lys Ser Phe Ile Leu Asp Met Tyr Ala Arg Val Tyr  
 113 305 310 315 320  
 116 Ala Ser Cys Ala Glu Pro Gln Asp Gly Gly Arg Lys Gly Ser Arg Ala  
 117 325 330 335  
 120 Arg Arg Phe Phe Ala His Phe Thr Cys Ala Thr Asp Thr Gln Ser Val  
 121 340 345 350  
 124 Arg Ser Val Phe Lys Asp Val Arg Asp Ser Val Leu Ala Arg Tyr Leu  
 125 355 360 365  
 128 Asp Glu Ile Asn Leu Leu  
 129 370  
 132 <210> SEQ ID NO: 2  
 133 <211> LENGTH: 374  
 134 <212> TYPE: PRT  
 135 <213> ORGANISM: Homo sapiens  
 138 <220> FEATURE:  
 139 <221> NAME/KEY: misc\_feature  
 140 <223> OTHER INFORMATION: GENBANK Accession no. M63904  
 142 <400> SEQUENCE: 2  
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 148 Asp Glu Lys Ala Ala Ala Arg Val Asp Gln Glu Ile Asn Arg Ile Leu  
 149 20 25 30  
 152 Leu Glu Gln Lys Lys Gln Asp Arg Gly Glu Leu Lys Leu Leu Leu  
 153 35 40 45  
 156 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile  
 157 50 55 60  
 160 Ile His Gly Ala Gly Tyr Ser Glu Glu Arg Lys Gly Phe Arg Pro  
 161 65 70 75 80  
 164 Leu Val Tyr Gln Asn Ile Phe Val Ser Met Arg Ala Met Ile Glu Ala  
 165 85 90 95  
 168 Met Glu Arg Leu Gln Ile Pro Phe Ser Arg Pro Glu Ser Lys His His

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169          100          105          110
172 Ala Ser Leu Val Met Ser Gln Asp Pro Tyr Lys Val Thr Thr Phe Glu
173          115          120          125
176 Lys Arg Tyr Ala Ala Ala Met Gln Trp Leu Trp Arg Asp Ala Gly Ile
177          130          135          140
180 Arg Ala Cys Tyr Glu Arg Arg Glu Phe His Leu Leu Asp Ser Ala
181 145          150          155          160
184 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Thr Glu Glu Gly Tyr Val
185          165          170          175
188 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile
189          180          185          190
192 Asn Glu Tyr Cys Phe Ser Val Gln Lys Thr Asn Leu Arg Ile Val Asp
193          195          200          205
196 Val Gly Gly Gln Lys Ser Glu Arg Lys Lys Trp Ile His Cys Phe Glu
197          210          215          220
200 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln
201 225          230          235          240
204 Cys Leu Glu Glu Asn Asn Gln Glu Asn Arg Met Lys Glu Ser Leu Ala
205          245          250          255
208 Leu Phe Gly Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val
209          260          265          270
212 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Glu Lys Ile Pro Thr
213          275          280          285
216 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Lys Gln Asp
217          290          295          300
220 Ala Glu Ala Ala Lys Arg Phe Ile Leu Asp Met Tyr Thr Arg Met Tyr
221 305          310          315          320
224 Thr Gly Cys Val Asp Gly Pro Glu Gly Ser Lys Lys Gly Ala Arg Ser
225          325          330          335
228 Arg Arg Leu Phe Ser His Tyr Thr Cys Ala Thr Asp Thr Gln Asn Ile
229          340          345          350
232 Arg Lys Val Phe Lys Asp Val Arg Asp Ser Val Leu Ala Arg Tyr Leu
233          355          360          365
236 Asp Glu Ile Asn Leu Leu
237          370
240 <210> SEQ ID NO: 3
241 <211> LENGTH: 355
242 <212> TYPE: PRT
243 <213> ORGANISM: Homo sapiens
246 <220> FEATURE:
247 <221> NAME/KEY: misc_feature
248 <223> OTHER INFORMATION: GENBANK Accession no. NM_002073
250 <400> SEQUENCE: 3
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253 1          5          10          15
256 Arg Arg Ile Asp Arg His Leu Arg Ser Glu Ser Gln Arg Gln Arg Arg
257          20          25          30
260 Glu Ile Lys Leu Leu Leu Leu Gly Thr Ser Asn Ser Gly Lys Ser Thr
261          35          40          45

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**PATENT APPLICATION:** US/10/663,650A **TIME:** 17:14:05

Input Set : A:\Updated Sequence Listing.ST25.txt  
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264 Ile Val Lys Gln Met Lys Ile Ile His Ser Gly Gly Phe Asn Leu Glu  
265 50 55 60  
268 Ala Cys Lys Glu Tyr Lys Pro Leu Ile Ile Tyr Asn Ala Ile Asp Ser  
269 65 70 75 80  
272 Leu Thr Arg Ile Ile Arg Ala Leu Ala Ala Leu Arg Ile Asp Phe His  
273 85 90 95  
276 Asn Pro Asp Arg Ala Tyr Asp Ala Val Gln Leu Phe Ala Leu Thr Gly  
277 100 105 110  
280 Pro Ala Glu Ser Lys Gly Glu Ile Thr Pro Glu Leu Leu Gly Val Met  
281 115 120 125  
284 Arg Arg Leu Trp Ala Asp Pro Gly Ala Gln Ala Cys Phe Ser Arg Ser  
285 130 135 140  
288 Ser Glu Tyr His Leu Glu Asp Asn Ala Ala Tyr Tyr Leu Asn Asp Leu  
289 145 150 155 160  
292 Glu Arg Ile Ala Ala Ala Asp Tyr Ile Pro Thr Val Glu Asp Ile Leu  
293 165 170 175  
296 Arg Ser Arg Asp Met Thr Thr Gly Ile Val Glu Asn Lys Phe Thr Phe  
297 180 185 190  
300 Lys Glu Leu Thr Phe Lys Met Val Asp Val Gly Gly Gln Arg Ser Glu  
301 195 200 205  
304 Arg Lys Lys Trp Ile His Cys Phe Glu Gly Val Thr Ala Ile Ile Phe  
305 210 215 220  
308 Cys Val Glu Leu Ser Gly Tyr Asp Leu Lys Leu Tyr Glu Asp Asn Gln  
309 225 230 235 240  
312 Thr Ser Arg Met Ala Glu Ser Leu Arg Leu Phe Asp Ser Ile Cys Asn  
313 245 250 255  
316 Asn Asn Trp Phe Ile Asn Thr Ser Leu Ile Leu Phe Leu Asn Lys Lys  
317 260 265 270  
320 Asp Leu Leu Ala Glu Lys Ile Arg Arg Ile Pro Leu Thr Ile Cys Phe  
321 275 280 285  
324 Pro Glu Tyr Lys Gly Gln Asn Thr Tyr Glu Glu Ala Ala Val Tyr Ile  
325 290 295 300  
328 Gln Arg Gln Phe Glu Asp Leu Asn Arg Asn Lys Glu Thr Lys Glu Ile  
329 305 310 315 320  
332 Tyr Ser His Phe Thr Cys Ala Thr Asp Thr Ser Asn Ile Gln Phe Val  
333 325 330 335  
336 Phe Asp Ala Val Thr Asp Val Ile Ile Gln Asn Asn Leu Lys Tyr Ile  
337 340 345 350  
340 Gly Leu Cys  
341 355  
344 <210> SEQ ID NO: 4  
345 <211> LENGTH: 374  
346 <212> TYPE: PRT  
347 <213> ORGANISM: Artificial  
349 <220> FEATURE:  
350 <223> OTHER INFORMATION: Synthetic  
352 <300> PUBLICATION INFORMATION:  
353 <301> AUTHORS: SEJAL M. MODY, MAURICE K. C. HO, SUSHMA A. JOSHI, and YUNG H.  
354 WONG

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/663,650A

DATE: 10/29/2004

TIME: 17:14:05

Input Set : A:\Updated Sequence Listing.ST25.txt  
 Output Set: N:\CRF4\10292004\J663650A.raw

355 <302> TITLE: Incorporation of Galphaz-Specific Sequence at the Carboxyl  
 356       Terminus Increases the Promiscuity of Galphai6 toward Gi-Coupled  
 357       Receptors  
 358 <303> JOURNAL: The American Society for Pharmacology and Experimental  
 359       Therapeutics  
 360 <304> VOLUME: 57  
 361 <306> PAGES: 13-23  
 362 <307> DATE: 2000  
 364 <400> SEQUENCE: 4  
 366 Met Ala Arg Ser Leu Thr Trp Arg Cys Cys Pro Trp Cys Leu Thr Glu  
 367 1               5                           10                           15  
 370 Asp Glu Lys Ala Ala Ala Arg Val Asp Gln Glu Ile Asn Arg Ile Leu  
 371               20                           25                           30  
 374 Leu Glu Gln Lys Lys Gln Asp Arg Gly Glu Leu Lys Leu Leu Leu  
 375               35                           40                           45  
 378 Gly Pro Gly Glu Ser Gly Lys Ser Thr Phe Ile Lys Gln Met Arg Ile  
 379               50                           55                           60  
 382 Ile His Gly Ala Gly Tyr Ser Glu Glu Glu Arg Lys Gly Phe Arg Pro  
 383 65               70                           75                           80  
 386 Leu Val Tyr Gln Asn Ile Phe Val Ser Met Arg Ala Met Ile Glu Ala  
 387               85                           90                           95  
 390 Met Glu Arg Leu Gln Ile Pro Phe Ser Arg Pro Glu Ser Lys His His  
 391               100                           105                           110  
 394 Ala Ser Leu Val Met Ser Gln Asp Pro Tyr Lys Val Thr Thr Phe Glu  
 395               115                           120                           125  
 398 Lys Arg Tyr Ala Ala Ala Met Gln Trp Leu Trp Arg Asp Ala Gly Ile  
 399               130                           135                           140  
 402 Arg Ala Cys Tyr Glu Arg Arg Arg Glu Phe His Leu Leu Asp Ser Ala  
 403 145               150                           155                           160  
 406 Val Tyr Tyr Leu Ser His Leu Glu Arg Ile Thr Glu Glu Gly Tyr Val  
 407               165                           170                           175  
 410 Pro Thr Ala Gln Asp Val Leu Arg Ser Arg Met Pro Thr Thr Gly Ile  
 411               180                           185                           190  
 414 Asn Glu Tyr Cys Phe Ser Val Gln Lys Thr Asn Leu Arg Ile Val Asp  
 415               195                           200                           205  
 418 Val Gly Gly Gln Lys Ser Glu Arg Lys Lys Trp Ile His Cys Phe Glu  
 419               210                           215                           220  
 422 Asn Val Ile Ala Leu Ile Tyr Leu Ala Ser Leu Ser Glu Tyr Asp Gln  
 423 225               230                           235                           240  
 426 Cys Leu Glu Glu Asn Asn Gln Glu Asn Arg Met Lys Glu Ser Leu Ala  
 427               245                           250                           255  
 430 Leu Phe Gly Thr Ile Leu Glu Leu Pro Trp Phe Lys Ser Thr Ser Val  
 431               260                           265                           270  
 434 Ile Leu Phe Leu Asn Lys Thr Asp Ile Leu Glu Glu Lys Ile Pro Thr  
 435               275                           280                           285  
 438 Ser His Leu Ala Thr Tyr Phe Pro Ser Phe Gln Gly Pro Lys Gln Asp  
 439               290                           295                           300  
 442 Ala Glu Ala Ala Lys Arg Phe Ile Leu Asp Met Tyr Thr Arg Met Tyr  
 443 305               310                           315                           320

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/663,650A

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TIME: 17:14:06

Input Set : A:\Updated Sequence Listing.ST25.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:4,7,8,11,12,13,14,15,19,20,21,22,23,24

**VERIFICATION SUMMARY**

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TIME: 17:14:06

Input Set : A:\Updated Sequence Listing.ST25.txt  
Output Set: N:\CRF4\10292004\J663650A.raw